

# TBG (Thyroxine Binding Globulin)

**CPT Code:** 84442

**Order Code:** 4352

**ABN Requirement:** No

**Synonyms:** TBG

**Specimen:** Serum

**Volume:** 1.0 mL

**Minimum Volume:** 0.5 mL

**Container:** Gel-barrier tube (SST)

## **Collection:**

### **Serum:**

1. Collect and label sample according to standard protocols.
2. Gently invert tube 5 times immediately after draw. Do not shake.
3. Let tube stand in a vertical position to allow blood to clot 30 minutes.
4. Centrifuge for 10 minutes.

**Transport:** Store serum at 2-8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

## **Stability:**

**Ambient (15-25°C):** 7 days

**Refrigerated (2-8°C):** 7 days

**Frozen (-20°C):** 28 days

**Causes for Rejection:** Specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits

**Methodology:** Immunoassay (IA)

**Turn Around Time:** 2 to 3 days

## **Reference Range:**

**Clinical Information:** Thyroxine-binding globulin (TBG), a glycoprotein produced in the liver, binds both thyroxine (T4) and triiodothyronine (T3) with

high affinity. Because TBG accounts for 76% of plasma protein thyroxine-binding activity, an increase or decrease in its circulating level alters total concentrations of T4 and T3 in blood, leading to potential confusion with true thyroid gland dysfunction. A number of diseases and medications, as well as inherited alterations in TBG gene expression, can change the serum TBG concentration. Measurement of TBG is useful in distinguishing quantitative TBG derangements from thyroid dysfunction. This analyte is elevated with estrogen therapy (especially oral contraceptive agents), during pregnancy and or hepatitis. Serum TBG may be decreased in cirrhosis, in the nephritic syndrome and by androgens.

*The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.*